
# *NC Series Breakout Exercise - Redo*

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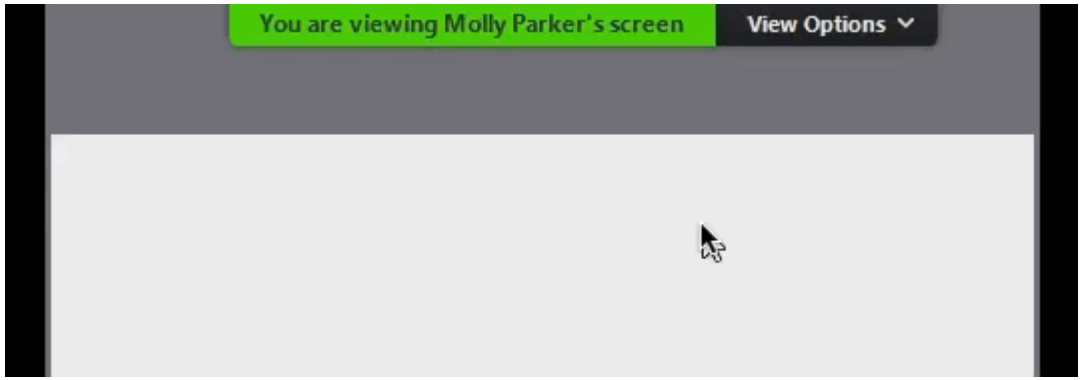
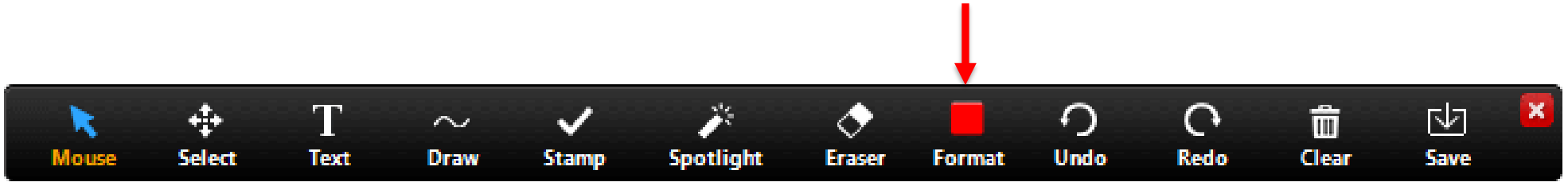
# Annotate

While viewing a shared screen or shared whiteboard, click “View Options” in the top right corner  and select “Annotate” from the drop down menu.




Once “Annotate” has been selected, you will see the following annotation tools:




***When you annotate please add your initials at the end**

Change Font size to 16

# Exercise Questions

- **What are your overall thoughts on the NC series top-level goals? Improvements to the current language? What is Missing? Annotate on slide 4, 5 and 6**
  - General guidance: Provide feedback on each objective, improvements to the current language, and what areas are missing to move the industry forward
- **Is there an alternate approach that you would recommend for the series?**

# Exercise Question #1: What are your overall thoughts on the NC series top-level goals? Improvements to the current language? What is Missing?

General guidance: Provide feedback on each objective, improvements to the current language, and what areas are missing to move the industry forward

| Objective | Improvements to the current language | What is Missing |
|---|---|---|
| **Accelerate Certification and Approval: Establish initial requirements to inform vehicle certification, pilot licensing, and operational approval.** | | |
| **Develop Flight Procedure Guidelines: Demonstrate refined flight procedures and related airspace design criteria that address scalability and safety. Develop preliminary guidelines for vertiport designs and implementation.** | | |

# Exercise Question #1: What are your overall thoughts on the NC series top-level goals? Improvements to the current language? What is Missing?

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| Objective | Improvements to the current language | What is Missing |
|---|---|---|
| **Evaluate the communication, navigation, and surveillance (CNS) Trade Space: Assess industry supported CNS technology to establish initial requirements.** | | |
| **Demonstrate an Airspace Management Architecture: Demonstrate and document a refined airspace system architecture capable of safely and reliably managing scalable AAM operations without burdening the current air traffic management system** | | |

# Exercise Question #1: What are your overall thoughts on the NC series top-level goals? Improvements to the current language? What is Missing?

General guidance: Provide feedback on each objective, improvements to the current language, and what areas are missing to move the industry forward

| Objective | Improvements to the current language | What is Missing |
|---|---|---|
| **Characterize Community Considerations: Conduct expanded characterization and initial impact assessment of passenger and community considerations through community feedback and measurements such as vehicle ground noise, cabin noise, and on-board ride quality.** | | |
| **Other** | | |

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**Annotate on Slide 8**

# Is there an alternate approach that you would recommend for the series?

Examples:

- The year prior to NC Demo, host an Industry tabletop exercise of low fidelity simulations to highlight incompatibilities with operator's desired procedures and airspace rules/limitations/procedures… or high-fidelity simulations to incorporate more vehicle and automation performance, mission success constraints and could include exogenous hazards (e.g. weather, obstacles ,etc.)
- Performance based standards must be measurable, so unmanned air systems must demonstrate an equivalent level of performance to manned air systems if they are to coexist in the same airspace and terminals
- When real estate is scarce, and obstacles abound, steeper approach angles and controllability are key enablers to demo

# Back to main room to provide feedback on breakout logistics or interesting discussions for whole group

Other information:
National Campaign Website
https://www.nasa.gov/aamnationalcampaign
National Campaign Scenario One Video
https://www.youtube.com/watch?v=t9g5DeOQOvY&feature=youtu.be
Slides 23-29 Highlight Scenario 1-7 objectives
https://ntrs.nasa.gov/archive/nasa/casi.ntrs.nasa.gov/20190030930.pdf